

# Appendix D

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## UNITS USED THROUGHOUT THE WORKING GROUP II VOLUME

*SI (Système Internationale) Units*

Physical Quantity	Name of Unit	Symbol
length	meter	m
mass	kilogram	kg
time	second	s
thermodynamic temperature	kelvin	K
amount of substance	mole	mol

Fraction	Prefix	Symbol	Multiple	Prefix	Symbol
$10^{-1}$	deci	d	10	deca	da
$10^{-2}$	centi	c	$10^2$	hecto	h
$10^{-3}$	milli	m	$10^3$	kilo	k
$10^{-6}$	micro	$\mu$	$10^6$	mega	M
$10^{-9}$	nano	n	$10^9$	giga	G
$10^{-12}$	pico	p	$10^{12}$	tera	T
$10^{-15}$	femto	f	$10^{15}$	peta	P
$10^{-18}$	atto	a	$10^{18}$	exa	E

*Special Names and Symbols for Certain SI-Derived Units*

Physical Quantity	Name of SI Unit	Symbol for SI Unit	Definition of Unit
force	newton	N	$\text{kg m s}^{-2}$
pressure	pascal	Pa	$\text{kg m}^{-1} \text{s}^{-2}$ (= $\text{Nm}^{-2}$ )
energy	joule	J	$\text{kg m}^2 \text{s}^{-2}$
power	watt	W	$\text{kg m}^2 \text{s}^{-3}$ (= $\text{Js}^{-1}$ )
frequency	hertz	Hz	$\text{s}^{-1}$ (cycle per second)

*Decimal Fractions and Multiples of SI Units Having Special Names*

Physical Quantity	Name of Unit	Symbol for Unit	Definition of Unit
length	ångstrom	Å	$10^{-10} \text{ m} = 10^{-8} \text{ cm}$
length	micrometer	$\mu\text{m}$	$10^{-6} \text{ m} = \mu\text{m}$
area	hectare	ha	$10^4 \text{ m}^2$
force	dyne	dyn	$10^{-5} \text{ N}$
pressure	bar	bar	$10^5 \text{ N m}^{-2}$
pressure	millibar	mb	1hPa
weight	ton	t	$10^3 \text{ kg}$

*Non-SI Units*

$^{\circ}\text{C}$	degrees Celsius ( $0^{\circ}\text{C} = \sim 273\text{K}$ ); Temperature differences are also given in $^{\circ}\text{C}$ rather than the more correct form of “Celsius degrees”
Btu	British Thermal Unit
kWh	kilowatt-hour
MW <sub>e</sub>	megawatts of electricity
ppmv	parts per million ( $10^6$ ) by volume
ppbv	parts per billion ( $10^9$ ) by volume
pptv	parts per trillion ( $10^{12}$ ) by volume
tce	tons of coal equivalent
toe	tons of oil equivalent
tWh	terawatt-hour

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